

REMARKS

Introduction

Claims 1-16 were originally pending in this application. Claims 1, 2, 4, 6, 7 and 10 have been amended. Claims 3, 8 and 9 have been cancelled. Claims 11 - 16 have been withdrawn from consideration by the Examiner pursuant to 37 CFR 1.142(b). Claims 17 and 18 have been added. Thus, claims 1, 2, 4 – 7, 10, 17 and 18 remain in this application.

Claim Rejections

35 U.S.C. §103(a) – Obviousness

Claims 1, 2, 5, 6, 7 and 10 were rejected as being obvious, and therefore unpatentable, over the Yamashita et al. ‘952 patent in view of the Bertschi et al. ‘033 patent. Claims 3, 4, 8, and 9 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Yamashita et al. in view of Bertschi et al. as applied to claims 1, 2, 6 and 7 in further view of the Susko et al. ‘866 patent. Claims 6, 7 and 10 were rejected as being unpatentable over Yamashita et al. taken together with the Sorenson et al. ‘343 patent. Claims 8 and 9 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Yamashita et al. in view of Sorensen et al. as applied to claims 6 and 7 in view of Susko et al.

Independent claims 1, and 6 have been amended to include the limitations formerly set forth in claims 3 and 8, respectively. Likewise, new independent claim 4 was rewritten in independent form to include the limitations formerly set forth in claims 1 and 4. In view of these amendments, applicant cannot agree that the invention defined in claims 1, 4 and 6 would have been obvious in view of the Yamashita et al., Bertschi et al., Susko et al. and Sorenson et al. patents. Accordingly, applicant respectfully traverses the Examiner’s rejections.

The Prior Art

The Yamashita et al. ‘952 Patent

The Yamashita et al. ‘952 patent discloses a thermoplastic polymer composition for improving melt-adhesion with synthetic resins or metals having polarity to eliminate the need for an adhesive when securing a polymer to same. Specifically, the Yamashita et al. ‘952 patent teaches a thermoplastic polymer composition that blends a thermoplastic elastic polymer that is a mainly an aromatic vinyl compound and a polymer block that is mainly a conjugated diene compound and/or a hydrogenated product thereof with a polyurethane block copolymer, a thermoplastic polyurethane elastomer and paraffin oil, each at a specific ratios, to improve adhesion under melting with various materials. The Yamashita et al. ‘952 patent further discloses that the specified thermoplastic polymer composition may be employed as one or more layers within a laminate structure and further discloses a method of manufacturing the laminate structure by melting the specified thermoplastic polymer composition to another material. As Yamashita et al. asserts that the thermoplastic polymer composition provides a flexible, elastic feeling as well as an impact-absorbing or cushioning effect. As a component in a laminate structure, the thermoplastic polymer composition disclosed by Yamashita et al. is molded to another material which may be manufactured to produce several different products within several different fields of application. (Column 25, ll. 22 – 45).

However, the Yamashita et al. ‘952 patent does not disclose or suggest a method of manufacturing a component of a center console assembly by actuating a core within a mold cavity and injecting a first molten thermoplastic material to define a substrate that serves as a lid of a center console and then retracting the core to provide a secondary void with the mold cavity to receive an injection of a second molten thermoplastic material having a density less than that

of the first molten thermoplastic material to define a soft-touch area on the lid, as required by independent claim 1, as amended. The Yamashita et al. ‘952 patent also fails to disclose or suggest the method described above for defining a housing of a center counsel assembly wherein the injection of a second molten thermoplastic material defines a soft-touch area on at least one sidewall of the housing, as required by independent claim 4, as amended. Further, the Yamashita et al. ‘952 patent does not disclose or suggest a method of manufacturing a center console assembly by providing a mold having a movable core supported relative to first and second die halves; injecting a first molten thermoplastic material into the first mold cavity to define a lid for a center console; moving the core to define a second die cavity and injecting a second molten thermoplastic material to define a soft-touch area on the lid, as required by independent claim 6, as amended.

The Bertschi et al. ‘033 Patent

The Bertschi et al. ‘033 patent discloses an injection molding apparatus for facilitating space efficient molding using opposed nozzles. Specifically, the Bertschi et al. ‘033 patent teaches a female mold half 14 and male mold half 16 having a mold core 55. The female mold half 14 and the male mold half 16 further include injection nozzles 28 and 36, respectively, for injecting a molding resin. In one embodiment, the male mold half 16 includes a mold core 55 that can be drawn back to create a larger mold cavity 22b (FIGS. 7 and 8). In another embodiment, the male mold half 216 includes a retractable partition 260 that divides the mold cavity 222. However, the Bertschi et al. ‘033 patent does not disclose or suggest a method for manufacturing a component of a center console assembly by injecting a first molten thermoplastic material to define a substrate that serves as a lid of a center console and then retracting the core to provide a secondary void with the mold cavity to receive an injection of a

second molten thermoplastic material having a density less than that of the first molten thermoplastic material to define a soft-touch area on the lid, as required by independent claim 1, as amended. The Bertschi et al. ‘033 patent also fails to disclose or suggest the method described above for defining a housing of a center counsel assembly wherein the injection of a second molten thermoplastic material defines a soft-touch area on at least one sidewall of the housing, as required by independent claim 4, as amended. Further, the Bertschi et al. ‘033 patent does not disclose or suggest a method of manufacturing a component of a center console assembly by providing a mold having a movable core supported relative to first and second die halves; injecting a first molten thermoplastic material into the first mold cavity to define a lid for a center console; moving the core to define a second die cavity and injecting a second molten thermoplastic material to define a soft-touch area on the lid, as required by independent claim 6, as amended.

The Susko et al. ‘866 Patent

The Susko et al. ‘866 patent discloses a phone holder for a vehicle console that is movable between closed and opened positions. Specifically, the Susko et al. ‘866 patent teaches a phone holder assembly 10 and a console body 12 for mounting in a vehicle. The console body 12 includes an opening 14 to receive a drawer 16. The drawer 16 includes a first slot 18 and a second slot 20, wherein the first slot 18 is configured to receive a portable phone 20. However, the Susko et al. ‘866 patent does not disclose or suggest a method of manufacturing a component of a center console assembly by actuating a core within a mold cavity and injecting a first molten thermoplastic material to define a substrate that serves as a lid of a center console and then retracting to core to provide a secondary void with the mold cavity to receive an injection of a second molten thermoplastic material having a density less than that of the first molten

thermoplastic material to define a soft-touch area on the lid, as required by independent claim 1, as amended. The Susko et al. '866 patent also fails to disclose or suggest the method described above for defining a housing of a center counsel assembly wherein the injection of a second molten thermoplastic material defines a soft-touch are on at least one sidewall of the housing, as required by independent claim 4, as amended.

The Sorensen et al. '343 Patent

The Sorensen et al. '343 patent discloses an apparatus for sequentially injected multi-component core-back injection molding. Specifically, the Sorensen et al. '343 patent teaches an apparatus 14 for injection molding a multi-component plastic product 10. The apparatus 14 includes a right adjustable mold cavity 20 defined by hydraulic piston 64, a right molding block 58 and center molding block 60. The apparatus 14 further includes a left adjustable mold cavity 24 defined by the piston 64, center molding block 60 and a left molding block 62. A first plastic material 30 is injected into the right mold cavity 20 to form the first component while a second plastic material 42 is simultaneously injected into the left mold cavity 24 to form the second component of the multi component product 10. The Sorensen et al. '343 patent teaches that the apparatus 14 is very suitable for the injection molding of hardened plastic four color rear lights for automobiles. However, the Sorensen et al. '343 patent does not disclose or suggest a method of manufacturing a component of a center console assembly by providing a mold having a movable core supported relative to first and second die halves; injecting a first molten thermoplastic material into the first mold cavity to define a lid for a center console; moving the core to define a second die cavity and injecting a second molten thermoplastic material to define a soft-touch area on the lid, as required by independent claim 6, as amended.

The Present Invention

In contrast to that which is disclosed in the references of record in this case, the present invention, as defined in independent claim 1, is directed toward a method of manufacturing a component of a center console assembly for the interior of a vehicle. The method includes actuating a core within a mold cavity so as to partition at least one area of the mold cavity to prevent a first molten thermoplastic material from completely filling the mold cavity and then injecting the first molten thermoplastic material having a predetermined density into a mold cavity so as to fill the mold cavity. The first molten thermoplastic material forms a structural element that defines a substrate that serves as a lid of a center console. The method further includes retracting the core within the mold cavity to provide at least one secondary void within the mold cavity and injecting a second molten thermoplastic material having a density less than the predetermined density of the first molten thermoplastic material into the secondary void of the mold cavity. The second molten thermoplastic material forms at least one soft-touch area bonded to and adjacent at least a portion of the structural element to define a soft-touch area on the lid.

Further, the present invention, as defined in independent claim 4, is directed toward a method of manufacturing a component of a center console assembly for the interior of a vehicle, as described above with respect to independent claim 1, but where the first molten thermoplastic material defines a housing of a center console having a plurality of sidewalls that define an interior compartment and the second thermoplastic material forms at least one soft-touch area bonded to and adjacent at least a portion of at least one sidewall that is visible from the interior of a vehicle.

Additionally, the present invention, as defined in independent claim 6, is directed toward a method of manufacturing a component of a center console assembly for the interior of a vehicle. The method includes providing a mold having first and second die halves and a core moveably supported relative to the die halves and disposed therebetween to define a first and second mold cavity between the moveable core and the first and second die halves. A first molten thermoplastic material having a predetermined density is injected into the first mold cavity so as to fill the first mold cavity thereby forming a structural element that defines a substrate that serves as a lid for a center console. The core is moved relative to the first and second die halves to define the second mold cavity and a second molten thermoplastic material having a density less than the predetermined density of the first molten thermoplastic material is injected into the second mold cavity thereby forming at least one soft-touch area bonded to and adjacent at least a portion of the structural element to define a soft-touch area on the lid.

Argument

A rejection based on §103 must rest on a factual basis, with the facts being interpreted without a hindsight reconstruction of the invention from the prior art. Thus, in the context of an analysis under § 103, it is not sufficient merely to identify one reference that teaches several of the limitations of a claim and another that teaches several limitations of a claim to support a rejection based on obviousness. This is because obviousness is not established by combining the basic disclosures of the prior art to produce the claimed invention absent a teaching or suggestion that the combination be made. Interconnect Planning Corp. v. Fiel, 774 F.2d 1132, 1143, 227 U.S.P.Q. (BNA) 543, 551 (Fed. Cir. 1985); In Re Corkhill, 771 F.2d 1496, 1501-02, 226

U.S.P.Q. (BNA) 1005, 1009-10 (Fed. Cir. 1985). The relevant analysis invokes a cornerstone principle of patent law:

That all elements of an invention may have been old (the normal situation), or some old and some new, or all new, is however, simply irrelevant. Virtually all inventions are combinations and virtually all are combinations of old elements. Environmental Designs v. Union Oil Co. of Cal., 713 F.2d 693, 698 (Fed. Cir. 1983) (other citations omitted).

A patentable invention . . . may result even if the inventor has, in effect, merely combined features, old in the art, for their known purpose without producing anything beyond the results inherent in their use. American Hoist & Derek Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. (BNA) 763, 771 (Fed. Cir. 1984) (emphasis in original, other citations omitted).

As the Court of Appeals for the Federal Circuit noted, “[w]hen a rejection depends upon a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references.” Ecolochem, Inc. v. Southern Calif. Edison, 56 U.S.P.Q. 2d 1065, 1073 (Fed. Cir. 2000). Here, there is simply no motivation provided in any of the Yamashita et al., Bertschi et al., Susko et al., or Sorensen et al. patents to combine their teachings. Furthermore, even assuming that such a motivation existed, a combination of these references would not result in the methods of manufacturing a component of a center console assembly of the type described in independent claims 1, 4 and 6, as amended.

There is a fundamental axiom in patent law that if a reference must be reconstructed or rearranged to change its operation to meet the applicant’s claim, that modification of the reference is inappropriate and cannot stand. The base reference on which the rejection under § 103 is founded is the Yamashita et al. ‘952 patent. However, this patent simply teaches a

thermoplastic polymer having a specific composition for improving melt-adhesion with synthetic resins or metals having polarity to eliminate the need for an adhesive. Moreover, Yamashita et al. simply disclose that the composition is to be melted to another material. Further, the Yamashita et al. '952 patent is silent as to the density of the other material(s) of the laminate structure.

The Bertschi et al. '033 patent discloses an injection molding apparatus for facilitating space efficient molding using opposed nozzles, but does not teach or suggest manufacturing a component of a center console assembly including the use of a mold having first and second die halves and a core moveably supported relative to the die halves as identified in the present application. Rather, the Bertschi et al. '033 patent teaches the use of a first nozzle and a second nozzle to inject a first and a second resin material into a mold cavity that is defined by a male mold half, a female mold half, and a mold core that can be drawn back.

The Sorensen et al. '343 and Susko et al. '866 patents do not make up for the deficiencies in the Yamashita et al. or the Bertschi et al. patents. The Sorensen et al. '866 patent discloses an apparatus for sequentially injected multi-component core-back injection molding of a multi-component plastic product, such as hardened plastic four-color rear lights for automobiles. The Sorensen et al. patent does not disclose or suggest a method of manufacturing a component for a center console assembly including the injection of a first and a second thermoplastic material having differing densities into a mold cavity. Nor does the Sorensen et al. patent disclose or suggest such a method the includes providing a mold having a movable core supported relative to first and second die halves to define a lid for a center console having a soft-touch area. Finally, the Susko et al. patent merely discloses a phone holder for a vehicle console that is

movable between closed and opened positions but otherwise does not address any of the deficiencies in the references as discussed above.

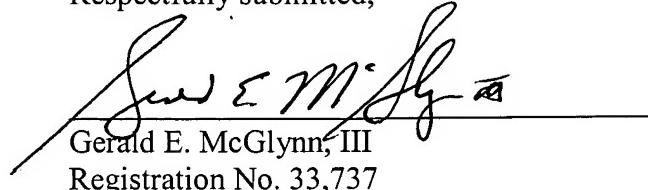
It is respectfully submitted that the Yamashita et al., Bertschi et al., Susko et al., or Sorensen et al. patent references skirt around, but do not suggest the claimed invention *as a whole*. See Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1383 (Fed. Cir. 1986). Further, it is respectfully submitted that one must pick and choose elements from the dissimilar devices and methods disclosed in the Yamashita et al., Bertschi et al., Susko et al., or Sorensen et al. patents and combine these elements by restructuring them, using hindsight and the applicant's own disclosure, to conclude that the claimed methods are obvious. Applicant respectfully submits that this would be improper in view of the disclosures of the prior art. Thus, applicant respectfully submits that the disclosures of each of these references would have to be improperly modified to meet the limitations of independent claims 1, 4 and 6.

Claims 2, 3, 5, 7, 10, 17 and 18 are all ultimately dependent upon independent claims 1, 4, and 6, and add further perfecting limitations. As such, the prior art references do not suggest the subject invention. However, even if they did, they could only be applied through hindsight after restructuring the disclosure of the prior art in view of applicant's invention. A rearrangement of the teachings described in these references to derive applicant's invention would, in and of itself, be an invention.

Conclusion

In view of the above, applicant respectfully submits that the claims, as amended, clearly distinguish over the prior art and are therefore allowable. Accordingly, applicant respectfully solicits the allowance of the claims pending in this case.

Respectfully submitted,



Gerald E. McGlynn, III
Registration No. 33,737
BLISS McGLYNN, P.C.
2075 W. Big Beaver, Suite 600
Troy, MI 48084
Phone: (248) 649-6090
Fax: (248) 649-6299
Email: gemcglynn@ipdirection.com

Date: January 21, 2005
Docket No.: 04253 (3883.00036)